

AMERICAN ART Toward an American Theory of Peace

A Monograph
by

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Field Artillery





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AMERICAN ART IS AS EFFORT TO STIMULATE THINKING AND DISCUSSION ON A THEORY OF PEACE FOR THE UNITED STATES OF AMERICA. THE MONOGRAPH CHALLENGES THE SUFFICIENCY OF CLASSICAL MILITARY THEORY AS A BASIS FOR CONTEMPORARY SECURITY STRATEGY PLANNING. USING THE STRUCTURE AND FORMAT OF SUN TZU'S ART OF WAR AS A MODEL, THE AUTHOR PROPOSES SEVERAL THEORETICAL CONSTRUCTS TO EXPLAIN THE CAUSES OF WAR, THE NATURE OF MODERN WAR, METHODS OF PLANNING AND WAGING WAR, AND DETERRENCE MEASURES AIMED AT REDUCING THE POTENTIAL CONDITIONS FOR WAR.					
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ABSTRACT

AMERICAN ART: TOWARD A THEORY OF PEACE by Major William J. Wansley, USA, 52 pages.

This monograph is an effort to stimulate thinking and discussion on a theory of peace for the United States of America. American national security and military planners currently develop strategic, operational and tactical concepts primarily based on the thoughts and theoretical constructs of classical military theorists. Although classical military theory still provides an excellent foundation for contemporary thinking about war and peace, such theories do not address the evolving nature of our contemporary society and the corresponding changes in the instruments of war and peace. Without a contemporary theory of war and peace, we will continue to plan modern security strategies and plans based on classical theories not grounded on the realities of contemporary society.

The format, structure and methodology of this monograph is based on Sun Tzu's seminal work <u>The Art of War</u>. Initial chapters address basic definitions of war and peace, the nature of war, sources of power and will. Following chapters concern the aspects of war theory which may contribute to peace and the successful prosecution of war. The last chapter presents leadership as the most critical element in the maintenance of peace and conduct of war.

AMERICAN ART is a contemporary synthesis of military, social, economic and political thoughts on war and peace. The paper is not intended to be a complete theory in any discipline, but a more holistic approach toward the development of a theory of peace.

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Preface

About 500 B.C., Chinese military leader and philosopher Sun Tzu wrote: "War is a matter of vital importance to the State; the province of life or death; the road to survival or ruin. It is mandatory that it be thoroughly studied." The phenomenon of war has been a subject of concern and study since the beginning of recorded history. Even the earliest primitive societies realized the importance of understanding the causes and effects of war and its inherent relationship to the security and well being of a society. To better understand and explain the phenomenon of war, leaders and thinkers of these societies have developed theories as intellectual tools to organize prevailing thoughts and ideas on the subject. Sun Tzu's classic work, The Art of War, is one of the earliest known and most enduring of such theories.

The enduring value of Sun Tzu's work is a function of its simplicity, clarity and grounding on ageless social principles of politics, economics and mutual security. War is a social phenomenon, as Clausewitz also suggests, "an act of human intercourse... a part of man's social existence."² A theory of war, therefore, organizes concepts of war based on social, economic and political realities for the purpose of understanding and projecting future manifestations of that phenomenon. The utility of the theory is in its contribution to the understanding of war by the policy makers of a society.

War remains an unpredictable and critically important phenomenon in the continuing evolution of our society. Yet, although our society has evolved and continues to evolve at a rapid rate, the United States of America does not currently have a theory of war reflecting changes in society and their effects on war. Without a contemporary theory of war, the United States must respond to the unique security challenges of a new world order within the limits of our understanding and interpretation of classical theories of war. While classical theories provide an excellent foundation for a contemporary theory of war, they should not be considered sufficient, by themselves, to meet the complex security challenges of today or tomorrow.

Our society has changed dramatically since the days of the classical theorists and so has the nature of war. A. A. Svechin, a Soviet military thinker of the 1920's, identified a change in the nature of war resulting from the industrial revolution. In a discussion about the theory of strategy, he

concluded; "A strategist will be successful if he correctly evaluates the nature of war, which depends on different economic, social, geographic, administrative, and technical factors." Since Svechin published <u>Strategy</u>, the nature of war has continued to evolve and so have the instruments of strategy. Military and national security strategists now routinely discuss and plan for the use of the multiple elements of national power in war. Without a contemporary theory of war, however, these strategists are planning the use of modern instruments of war based on classical theories of war.

The distinction between strategy and theory is not insignificant. While a strategy for war may employ all instruments of national power to attain strategic aims, it may not fully address the political, social, economic underpinnings of war. A strategy does not help to identify the causes of war, the sources of power in a country, the strength of the will of the people, the relationship between the social order of a country and its armed forces, or even the center of gravity of a country. In short, the use of classical theory to plan modern strategies risks turning a war into, as Clausewitz says, "something alien to its nature."

The French and U.S. involvement in Vietnam, the Soviet Union's adventures in Afghanistan and the Israeli Operation Peace for Galilee are all examples of strategists employing inappropriate ways and means to achieve strategic aims. In each case, military forces were the dominant instrument employed to achieve the primary strategic aim of eliminating ideological or political movements. There were several consequences of this theory-strategy mismatch: military objectives contributed little towards achieving the primary strategic aim, military commanders felt hamstrung by their government's policy on the use of force and the participating governments lost credibility with the people back home. A failure to recognize the modern nature of society and war resulted in a misapplication of strategy. A modern theory may have precluded these failures.

The purpose of this monograph is to generate intellectual thinking and debate on war theory leading toward an American theory of peace. The goal of the paper is not a definitive and complete theory, but a catalyst for the continuing study of war theory as a step toward a practicable theory for our country. Such a theory should be targeted to the lowest level of actors in our society responsible for the development and execution of national security affairs. These actors are the economic, political, diplomatic and military action officers in our government who prepare initial

drafts of national security policy and strategy, war and campaign plans, operational concepts and materiel developments for the conduct of war.

The methodology and format of this monograph may appear foreign to readers not familiar with Sun Tzu's seminal theory of war. The two most renown war theorists of all time, Sun Tzu and Clausewitz, present their theories with dramatically different approaches. Sun Tzu presents his eastern wisdom on war as conclusions, leaving readers to accept his logic. Clausewitz, on the other hand, presents detailed arguments with counter points to challenge the reader to "inquiry which is the most essential part of theory." As a result, Sun Tzu's The Art of War is considered more readable while Clausewitz's On War provides a much more detailed explanation of each aspect of his theory. While I have drawn heavily from both of these theorists, my methodology and format mirrors the brevity, simplicity and readability of Sun Tzu's thirteen chapters of conclusions.

Sun Tzu's methodology and format provide an efficient structure for the purpose of this monograph, however detailed reference and explanatory notes have been added to stimulate further inquiry. Thirteen chapters of conclusions allow me to cover a wide range of subjects, essential to a theory, in a relatively short paper. At the beginning of each chapter is a narrative introduction to set the ground work for the following conclusions and to maintain coherence in the presentation of the theory. Since many of the conclusions are already commonly understood concepts of war from other authors, they are simply noted for reference and further study. Where conclusions are original thoughts or a synthesis of multiple sources, I have provided my logic, or synthesis, and references in the notes. My intent is to stimulate thought and further study while providing support for new concepts. (Notes in the main body of the paper correspond to the numbered paragraphs within each chapter.)

As a preview, the first six chapters of the paper address the specific concepts which comprise the base of the theory. The theory builds on a broad definition of war, which helps to identify the causes of war and its relation to peace. Clausewitz's paradoxical trinity provides an explanation of the nature of war in general and the basis for an assessment of the contemporary effects of technology, economics and the media on war. Sources of power provide a foundation for understanding the causes and potential instruments of war. Will is discussed as the soul of war, without which war cannot exist. The last of these six chapters presents estimates

as the criteria for the judgement required of the "statesman and commander" to establishment of "the kind of war on which they are embarking."⁷

The next six chapters address aspects of war which contribute to the maintenance of peace and the successful conduct of war. These chapters include conclusions about the preparations for war, a balanced theory of deterrence, and strategy as it relates to all levels of war. The paper presents operational planning concepts for war in the chapter on war plans. An environment of war is presented to set the stage for constructs on waging war. The last of these chapters, waging war, presents enduring and general constructs which contribute to success in war.

The last chapter of the monograph concerns leadership. Leadership is a dominant factor in war of all types and must be considered an integral part of any theory of war. War without leadership would be violence or other imposing actions without direction or purpose. If there is to be any positive outcome from war, it must flow from the values and inspiration of the leadership on both sides. Civilian leaders, generals and soldiers must all understand and be able to provide quality leadership for the preparation for and conduct of war. Leadership remains the most critical task in war.

The monograph is a contemporary synthesis and interpretation of the thoughts and ideas of selected classical and contemporary social, political, economic, and military thinkers. As such, the paper is but one perspective, based on many others, toward the development of a national theory of war - I claim no more.

Further study and discussion on the subject of war theory can only improve our prospects of living in peace. Therefore, this monograph is a first step toward a theory of peace.

I. The Goal

Peace is the American goal of war, but lasting peace is seldom a product of military warfighting alone. Peace is gained when war transitions to a more acceptable social order where political entities can resolve differences without having to impose will on each other. American society has evolved based on common democratic values and a free market economic system. Therefore, our national interests are based on both the need to provide security for our value system and the need for economic stability. Not all national interests, however, are vital to the survival of the state. We are more willing to accept more sacrifices for some interests than others, depending on the perceived threat. War is initiated only when policy makers are optimistic that more can be gained relative to these interests by going to war than not.

- 1. The goal of war is peace. *
- 2. Peace is the absence of perceived threats to the will of a political entity: this will is usually represented by national security interests. Perceived threats are relative to the generally accepted level of political intercourse between political entities.
- 3. Peace exists when political entities return to generally accepted levels of political intercourse a state of political equilibrium. At this level of intercourse, the will of one political entity does not threaten the will of another.
- 4. Will is a function of the strength of a groups core values and its standard of living.
- 5. The will of a political entity is usually manifested in the security of national interests. There are three levels of national interests: vital interests, critical interests and peripheral interests.
- * Notes correspond to the numbered paragraphs within each chapter.

- 6. The loss of vital interests directly endangers the survival of the political entity.
- 7. The loss of critical interests would threaten vital interests and may cause a dramatic shift in core values or standards of living.
- 8. The loss of peripheral interests threatens a critical or vital interest and may cause a minor adjustment in core values or standards of living.
- 9. A decision to go to war over the loss or potential loss of national interests is usually based on the strength of will to prosecute the war and the means available.
- 10. War usually occurs when human conditions exist which threaten the core values and standard of living of a political entity. Such conditions are: poverty, ambition, greed, fear, hatred, jealousy, desperation and extremism (including national, ideological and religious types). These conditions contribute to optimism.
- 11. Political entities also go to war because of optimism. "Anything which increases that optimism is a cause of war." Optimism is the belief that the end state of the war is better than not going to war. Optimism is a function of the assumptions that the security of national interests is possible, an alternative to war is not acceptable and the national interest is worth the expenditure of means necessary to achieve the strategic aim.
- 12. "Anything that dampens that optimism is a cause of peace." Once political entities realize there is more to gain through normal levels of political intercourse, they consider peace.
- 13. "Inability to carry on the struggle can, in practice, be replaced by two other grounds for making peace: the first is the improbability of victory; the second is its unacceptable cost."
- 14. War may be precluded if alternative values, standards of living or lifestyles are acceptable by the people whose security interests are threatened.

II. The Nature of War

The cornerstone of this theory is a broad definition of war - any act; political, economic, military or other, by one political entity for the purpose of imposing will on another. Although this definition may seem paradoxical for an American theory of peace, it is intended to focus policy makers on the social conditions that give rise to war and the multiple instruments available for waging peace. The definition is also intended to encourage a "just war" decision for the imposition of will on others before casually implementing foreign policy initiatives. If national interests are truly at stake in a given situation, acts of war proportional to the threat should be considered as early as possible to preclude escalation to more violent means. Through the creative use of all instruments of national power in the early stages of war, the threshold for violent means may never be broken.

War is a social interaction of power between political entities, which include nation states, religious or ideological movements, and any other group with a common political goal. War is more than policy of other means, it is the a scution of policy. War is still characterized by danger, chaos and constant uncertainty, all factors that must be understood by policy makers, the people supporting the war and the commanders of the instruments of power.

- 1. War is an act of force to compel our enemy to do our will.
- 2. War is a heightened state of political intercourse. It begins when one group attempts to impose will upon another through the use of instruments of power above normal and acceptable levels of intercourse.
- 3. The world has seen many types of war: total, limited, guerrilla, conventional, nuclear, cold, drug, economic, environmental, cultural, religious and informational. Yet, potential exists for other varieties in the future.
- 4. War is conducted by two or more opposing political entities. Each entity engaged in war is governed by three dominant tendencies making a trinity: the hostility groups hold towards each other, the elements of chance and creativity embodied in its conduct, and the policy which provides reason and

direction. All three tendencies are necessary for the conduct of war for they shape the ends, ways, and means of the war.

- 5. These three tendencies are manifested in war through the actions of groups of actors: the people on whose behalf wars are conducted, the people who conduct the war (instruments), and the people who embody and express the reason war is conducted (policy makers).
- 6. The three tendencies must remain in a relative balance for the successful prosecution of war, much like "an object suspended between three magnets."
- 7. War is a continuous social interaction between the respective trinities of opposing groups; the will of one influencing another. "In war, the will is directed at an animate object that *reacts*."
- 8. The people project the core values, ideals, and attitudes which provide the emotion, will and determination that allow and fuel the conduct of a war.
- 9. The instruments of power are the leaders, organizations and transactions a group may use to impose will on another. These are the "means" means of war. The creative use of these instruments are the "ways" by which war is conducted.
- 10. Power, usually manifested in the form of instruments, flows from the sources of knowledge, wealth and strength. War provides a measurement of relative power.
- 11. The policy makers are the people concerned with the collective well being of the political entity. Usually, but not always, the policy makers are the legitimate representatives of the people.
- 12. Policy makers conduct war to attain political aims called "political objects, or "strategic aims." These are the "ends" of war.
- 13. War is a chameleon, it is ever changing. The type and temperament of a war to be conducted varies with time, place, culture and means.

- 14. War is chaos, it is characterized by fog, friction, uncertainty and disorder.
- 15. "Everything in war is very simple, but the simplest thing is difficult. The difficulties accumulate and end by producing a kind of friction that is inconceivable unless one has experienced war."
- 16. "Friction is the only concept that more or less corresponds to the factors that distinguish real war from war on paper." "Friction...is the force that makes the apparently easy so difficult."

III. The Nature of Modern War

As our society has evolved, so has the nature of war. Technology, economics and the media have all had a dramatic affect on dominant tendencies of the nature of war. Neglecting these factors today would be mistaking war for something "alien to its nature."

- 1. The trinity still represents the dominant tendencies modern war. Each tendency, however, has been amplified over time.
- 2. The trinity of dominant tendencies is electrified by the effects of technology, media and economics; much like an object suspended between three electro-magnets. This electrification serves to galvanize the bonds between the dominant tendencies while increasing the potential energy for its rapid disintegration.
- 3. In the United States of America, as well as other democratic entities, the electrification of the trinity serves as an accelerated check and balance between the dominant tendencies. In non-democratic entities, the trinity may be out of balance and therefore electrification serves to increase the potential for faulty policy and opposition to that policy.
- 4. Technology has increased the quantity, quality and speed of information as well as other interactions of war. Technology can also have a revolutionary affect on the conduct of war, for it increases the potential energies of the people by increasing the flow, quality and emotional value of information. Technology also increases the potential effects of the instruments of power and it increases the ability of the government to monitor and control the actions flowing from policy.
- 5. The media serves to gather, analyze and distribute both information and knowledge. Modern media speeds and amplifies its effects on the conduct of war. Through the media, popular support for a war can be more rapidly generated or eroded. The media can compliment or mitigate the effects of the instruments of power. As a sounding rod for popular support, the media can challenge the validity of a policy and serve as a moderating influence on policy options.

- 6. Economics is inherent in the means available for the conduct of war. Modern economic development has dramatically increased the influence of economics on the conduct of war. The people's willingness to sacrifice in support a war is influenced by their quality of life and lifestyle. Economics also drives the quality and quantity of programs available as instruments of power. In one way or another, policy is affected by the economic capability of the political entity. Economics may be less important, however, in a situation threatening the survival of a political entity.
- 7. Popular support from the people can only be generated and maintained if the people are convinced the strategic aims of the war are in line with their values and those values are not subject to change. The people's level of support, represented by their willingness to sacrifice, and their level of commitment will drive the means available to the government for the conduct of war. The potential energy of popular support, both positively and negatively, is amplified by technology, media and economics.
- 8. The effectiveness of the instruments of power is only limited by their creative integration. Technology, media and economics have increased the potential effects of each of the instruments to such a level as to offset the effects each other towards a given end. One belligerent's reliance on advanced technologies, however, also presents new types of vulnerabilities for the opponent to strike. Each instrument must be optimized in a coherent strategy to achieve the overall maximum effects of power without waste.
- 9. The concept of optimization is the modern expression of economy of force. The instruments of power should all be applied so that none are wasted at the decisive place or time. However, no more of each instrument should be applied than is necessary to accomplish the desired end. The excessive application of power will usually complicate or nullify apparent victory.
- 10. Policy makers in a democratic system are now, more than ever, held accountable on a daily basis for decisions. The media and technology serve to accelerate the transmission of information and decisions to policy makers and the people. Economics is now given serious consideration prior to the commitment of any resources to war. War policy is more likely to be

debated and supported by the people before it is enacted as a result of the electrified trinity.

- 11. The potential still exists, however, for a normally balanced trinity to be temporarily unbalanced by excess hostility of the people towards an enemy, impatient or irrational policy by the government and insufficient capabilities within the instruments of war. This is part of the friction of war.
- 12. A political entity may conduct war with an unbalanced trinity. A leader who can control the will of his people by force may be able to act in a less than reasoned or representative manner. Or, a group may not have the capability (ways and means) to achieve the desired political aim through normal means so revert to unconventional or terrorist activities. A war conducted by an unbalanced trinity will result in a war policy that is not connected to the will of the people or extant capabilities and thus may not be rational. Such a war is usually unjust, costly and unlikely to achieve the long-term political aim.
- 13. When the opposing enemy is conducting war with an unbalanced trinity, efforts should be directed towards re-balancing the trinity. Otherwise, the effects of war may not have the desired effect on the will of the opponent.

IV. Sources and Instruments of Power

The power of a political entity, manifested in its instruments of power, is the ability of one group to influence another to achieve political aims. This social interaction of power may or may not be violent, but will result in the expenditure of resources and may require sacrifices by the members of the group. Although all political entities have the same potential sources of power, each society draws upon them in accordance with their own value system to develop their instruments of power.

- 1. A political entity's ability to influence another is based on its sources of power.
- 2. Sources of power are Knowledge, Wealth and Strength. These sources of power provide potential energy for a political action.
- 3. Knowledge is the most valuable source of power; it is theoretically inexhaustible. The limit of knowledge at a given point in time is based on the entity's understanding of its use. The source of knowledge power available to an entity is always increasing. However, for many reasons a society may not be able to benefit from this source. The growth of knowledge is accelerated when shared across society and disciplines. An understanding of how to use knowledge also provides potential growth in the level of the other sources of power. The core values of an entity are based on knowledge; therefore, knowledge has a direct affect on will.
- 4. Wealth is primarily based on the economic development of a political entity. The level of wealth power available to an entity is always increasing or decreasing in relation to other entities. The growth of wealth is accelerated through the application of knowledge, an increase in markets for economic development, and a entity's ability to develop desired products in those markets. Political policies concerning distribution of wealth to other sources of power or individuals within a society, however important, may constrain the growth of wealth. Wealth translates to standard of living for the individuals of an entity; therefore wealth also has a direct affect on will.

- 5. Strength is primarily based on military capability, but also based on the capability of the political entity's industrial base and mobilization process in support the military instrument. The level of military capability available to an entity is always increasing or decreasing in relation to other entities. Military capability flows from the integration of portions of an entity's knowledge and wealth. Growth in military capability results from an increase in knowledge and wealth.
- 6. Most nations have varying stores of each type of power. Although two nations may have similar aggregate levels of power, seldom will two nations have equal amounts of each type of power. A minor difference in the perceived levels of power may result in optimism. Perceptions of power are as important as actual capabilities in the prevention and conduct of war.
- 7. Sources of power are tapped and mobilized through the instruments of power. All instruments are developed and guided by the political leadership. These instruments manifest themselves through traditional leadership roles, organizations and methods of influence. The creative use and integration of all instruments produces a synergistic effect, maximizing the aggregate power available.
- 8. At any given point in time, there is a limit to the aggregate amount of power available to an entity. The maximum level of power available to an entity may only be gained through the sub-optimal use of some or all instruments. The goal should be to optimize the effects of each instrument in contribution to the whole for both efficiency and effectiveness.
- 9. The power of knowledge is applied as policy through the political, diplomatic, informational, educational and cultural instruments. There is no limit to the number of instruments or the effects that can flow from knowledge.
- 10. The power of wealth is applied as policy primarily in the economic instrument and to a lesser degree in the political, diplomatic and military. Economic instruments are by their nature, slower acting, more difficult to control, but longer lasting in their effects.

11. The power of strength is applied as policy primarily in the military instrument and to a lesser degree diplomatic. The military instrument usually has the most rapid affect but is also the most costly in terms of means and corresponding will. It is usually the instrument of last resort or of desperation and is least likely, if used alone, to achieve the desired long term goal of peace. The diplomatic instrument draws on strength for deterrence but is eventually based on the credibility and capability of the military instrument and will to use it if necessary.

V. Will

One constant in war, regardless of time period, is the will required for its conduct. The sacrifices inherent in the conduct of war can be severe, if not fatal. A political entity considering war must not only have a will to impose on another, but also be willing to accept the sacrifices necessary to achieve that end. While will has always been a function of the core values of a society, economic well being is now an essential element of will in countries with advanced economies. Even in countries with less developed economies, perceptions of economic inequality may contribute to will. Therefore, to understand the nature of war for a specific political entity, we must understand their components of will. Usually, these components can be found by assessing social, political and religious values as well as the economic system of a society.

- 1. Will is the soul of war.
- 2. Will is based on the strength of core values and standard of living of the people in a political entity.
- 3. The core values of a people are derived from the historical, religious and ideological basis upon which a political entity is formed. Core values are those ideas or concepts for which the people are willing to sacrifice, even their lives. Core values are manifested in the character and determination a people demonstrate in defense of those values. The character and nature of the instruments of power flow from these values.
- 4. The core values of the United States of America are as follows:
- ✓ Self-determination this fundamental principle of democracy establishes how and by whom the people of a nation are led. This principle drives the system of government, laws, justice and wealth distribution within the country.
- ✓ Inherent worth of the individual values every individual as a moral, legal, and political entity. Every individual has inalienable rights regardless of race, religion, sex or social class. The individual does have a

responsibility for the collective security of the nation and other public responsibilities. Individual rights must be balanced by the actions necessary for the common good.

- ✓ Leaders are accountable to the people The power provided to the leaders of our nation directly flows from the people. As a result, their decisions must be accountable to and reflect the will of the people.
- ✓ Policies must reflect national values The accountable decisions of policy makers must be in line with our fundamental values. Stated and unstated national interests must be within our value system.
- ✓ Nations and systems with similar values should be nurtured Americans realize the interdependency of international systems and accept
 common values and rights as stabilizing factors. We support democratic
 values through the use of our instruments of policy.
- ✓ Liberalism Americans expect freedom from governmental intervention in daily activities. This freedom allows for individual choice and rights of privacy.
- ✓ A Judeo-Christian heritage of values Americans have a sense of humanity, sensitivity to the plight of others and a willingness to forgive subsequent to a confrontation. These values are inherent in our use of power.
- 5. The core values of a political entity dictate the character of its policy and the development and use of the instruments of power. The character of military forces and their ways are inherently tied to the character of the people. In a democratic system, this link between the people and the military instrument must be fostered as a common will.
- 6. The people's standard of living is a natural outcome of values and wealth which support quality of life.

- 7. Free market economics and the individual freedom to pursue prosperity and happiness flow from these values. Economic well being usually translates to an individual's quality of life and freedom to choose alternative lifestyles. Americans are, however, willing to sacrifice both of these and their lives to maintain the core values.
- 8. Will is affected by the perceived threat to core values and standard of living. There is a limit to the amount of sacrifice people are willing to accept in the defense of national interests. Therefore, policy must constantly maintain a balance between the sacrifice required to defend the different levels of national interests and the relative importance of that interest to the survival of the nation. Depending on the strength of the two components of will within a political entity, values may change or alternative lifestyles selected rather than resort to war.
- 9. An increase in the commitment to core values or an increase in the standard of living of a society will directly increase the strength of a society's will.
- 10. In general, and in a truly democratic society, a will-power dynamic exists. An increase in the strength of will of the people increases the amount of power available to the policy makers.
- 11. This dynamic suggests the more aggregate power available to a political entity, the more willing it will be to use power to affect the conditions that give rise to war. The less power available to an entity, the less willing it will be to intervene short of a threat to vital interests.
- 12. The distribution of the sources of power within an entity will also control its willingness to use power. A nation with a declining source of wealth and corresponding standard of living may be less willing to use economic instruments and more willing to use the military instrument earlier in the escalation of war.
- 13. A nation with a rapidly growing source of knowledge and corresponding growth of other instruments will probably have more will to use non-military instruments and be less willing to use military instruments.

When vital interests are at stake, all instruments may be considered for use immediately.

14. Since will is the soul of war, it is usually the strategic center of gravity.

VI. Estimates

"The first, the supreme, the most far-reaching act of judgement that the statesman and commander have to make is to establish by that test the kind of war on which they are embarking; neither mistaking is for, nor trying to turn it into, something that is alien to its nature." Clausewitz's advice remains sound, however defining the kind of war upon which to embark requires a new understanding of war. Without this understanding, a strategy for the conduct of war may not address the political objective for which the war is being fought.

Estimates begin with a scientific analysis of the objective conditions that give rise to war and the conditions surrounding a war. Through this process, the root causes of war can be identified rather than just the symptoms that usually threaten our national interests.

Estimates also assess the risk associated with war. Through the identification of enemy capabilities and intentions based on all sources and instruments of power, strengths and weaknesses can be identified. A comparison of relative power between adversaries will highlight risk and help to identify the best strategy for imposing will.

- 1. Estimates define the kind of war likely to be successful, identify centers of gravity and assess the risk of operations.
- 2. If possible, sources of power should be assessed to find a single center of gravity, "the hub of all power and movement." It is likely, however, in a modern society to have multiple centers of gravity depending on the strength and distribution of its sources of power.
- 3. Each center of gravity should be assessed to find the stress points which support the source of power. If a center of gravity cannot be influenced directly, the stress points provide an indirect approach towards that aim.
- 4. "Know the enemy and know yourself; in a hundred battles you will never be in peril." A proper assessment of relative power requires a complete understanding of friendly and enemy sources of power and all available instruments of power.

- 5. "When you are ignorant of the enemy but know yourself, your chances of winning or losing are equal."
- 6. "If ignorant both of your enemy and of yourself, you are certain in every battle to be in peril."
- 7. "When he is united, divide him." Because of the cost of modern war, alliances and coalitions are frequently involved. Any differences in the will of alliance partners are potential stress points.
- 8. "Attack where he is unprepared; sally out when he does not expect you." A proper assessment of relative sources of power identifies the strengths and weaknesses of the enemy.
- 9. "Now if the estimates made in the temple before hostilities indicate victory it is because calculations show one's strength to be superior to that of his enemy; it they indicate defeat, it is because calculations show that one is inferior. With many calculations, one can win; with few one cannot. How much less chance of victory has one who makes none at all! By this means I examine the situation and the outcome will be clearly apparent."
- 10. Estimates must be considered in two parts, capabilities and intentions. A threat does not exist without both parts.
- 11. Capabilities include the aggregate power that can be generated through the creative use of the instruments towards the aim. Capabilities usually are developed over time and can only be reduced rapidly through destruction. Therefore, capabilities can be measured and predicted with some certainty.
- 12. Intentions include the motivation and willingness to expend available resources to achieve that aim. Intentions can change overnight, therefore, they are more difficult to measure and predict.
- 13. Estimates also assess risk. The uncertainty of intentions is usually the greatest portion of risk. Risk can be reduced through the creative use of the instruments and properly prepared plans.

VII. Preparation for War

Sources of power and their instruments cannot be developed overnight. The capabilities required to wage war or peace must be developed over time based on a long term commitment to peace. Such capabilities require study, funding, development and training. There is no greater service a government can provide its people than to prepare for war as a step towards peace. The commitment of a political entity towards the preparation for war flows from its will.

- 1. Peace can only be sustained through preparation for war and policy measures to prevent war.
- 2. Preparation for war begins with the recognition of its importance to the political entity. "War is a matter of vital importance to the State; the province of life or death; the road to survival of ruin. It is mandatory that it be thoroughly studied."
- 3. The ability of a political entity to resist the will of another is a function of the strength of the former's will, the commitment of resources to prepare for war, and the capability of its instruments of power.
- 4. The will of a political entity, in a democracy, reflects the will of the people. Therefore, the people must be educated to maintain their commitment to national security responsibilities to ensure the government provides requisite capabilities.
- 5. The level of resources committed to security policy must be commensurate with the variety and levels of threats to national interests, and with threats to the different sources of power. The expenditure of non-military resources to impose will is usually least costly in terms of standard of living and sacrifice, however, these instruments require a longer term commitment to have affect. The political entity must balance the resources committed to the preparation for war to ensure a balanced set of instruments for the prosecution of war.

- 6. A failure to balance the expenditure of national resources across the sources of power (knowledge, wealth and strength) or failure to modernize the instruments of power will result in capability gaps and national vulnerabilities.
- 7. In general, it is better to be pro-active in the expenditure non-destructive instruments to defend against threats to lower levels of interests to preclude escalation of the threat to higher levels of national interest. Failure to prepare a full range of non-destructive capabilities for this purpose will result in an earlier use of destructive instruments. However, because arms are the "cash payment" of war, special attention must be given to the preparation of military capabilities for war.
- 8. As American society evolves over time, so must the American art of war. This is the only way the balance of the trinity can be maintained. The American instruments of power must flow from the contemporary character of the people and the materiel capabilities available.

National Trends and Character

- 9. Americans, in general, are individualistic, aggressive, community or team-oriented and compassionate. We dislike protracted conflict and unwarranted destruction or misery. While we are willing to use force to protect our interests, we may not be willing to sacrifice our standard of living unless the survival of the state is threatened.
- 10. Americans have become accustomed to the use of high-technology in peacetime and as instruments of war. We would rather expend materiel resources than waste a single American life. These trends shape the American way of war.
- 11. The goal of American warfighting is to impose our will on the enemy through the use of the instruments of power with a minimum expenditure of resources, as quickly possible, and without unnecessary destruction of the enemy or his society.

Structure of the Instruments

- 12. The nature and character of the people must be reflected in the makeup of the instruments of power. A high quality, all volunteer force, comprised of active and reserve forces is most desirable. The active component is essential for deterrence, to maintain readiness levels for immediate response to crisis, and as a training base for mobilization. The reserve component is essential for mobilization forces and to maintain the tie with the people in the communities across society.
- 13. The instruments of power must be structured to operate in both minor and major operations. They must be flexible and adaptable to meet the needs of the specific conditions of war. All instruments must be able to interface with each other. Each instrument has its own type of warriors.
- 14. Standing inter-agency Task Forces may be necessary to provide an immediate response to war threatening situations. Ideally, such forces would have already worked and trained together under an acceptable command and control arrangement

Materiel

- 15. Materiel should be designed to complement our warfighting concept and to gain the greatest advantage over our enemies. However, systems must be designed to meet national fiscal limitations.
- 16. Systems must be designed to have effect on the enemy in all three domains of war. The synergistic effects of systems employed in all domains maximizes their concentrated effects while economizing in each. Non-destructive systems should be further developed towards this end.
- 17. The development and fielding of materiel is a continuous process. Materiel used by the instruments of power must also compliment the nature and character of the people and their forces.
- 18. Technology can have such a dramatic effect on war and is changing at such a rapid rate that modernization of equipment can never be complete. The development of new systems must be based on potential threat capabilities, however, should not be limited to known potential threats. If

creative minds can develop leap-ahead capabilities or more efficient systems, such systems should be considered as worthwhile investments towards peace.

- 19. A systems approach to materiel development serves to maximize effects on the enemy. A system should be developed to fulfill the needs of the OODAF (Observe, Orient, Detect, Action and Feedback) loop.
- 20. The development and maintenance of flexible industrial capability is essential to preparation for war. The destructive nature of warfighting activities requires a capability to produce replacement equipment. It is unlikely in peacetime, however, that the scale of capital equipment necessary for wartime production can be maintained in a cost effective manner. Therefore, this industrial base must be flexible enough to produce military and non-military products off the same line with minor changes. Flexible manufacturing also provides tremendous potential for rapid materiel improvements in wartime and responsiveness to consumer needs in peacetime.

Doctrine

- 21. Doctrine is the glue of operations; it should be based on a sound theory of war, our warfighting concept and the nature of our people.
- 22. Doctrine is not directive in nature; it must allow for creative solutions to the unique situations of war. Doctrine should not make our actions predictable but provide a common understanding of sound principles and tenets that can be applied in a variety of ways.
- 23. The goal of doctrine is not to be "too badly wrong" so that we can rapidly get it right when the time comes.
- 24. Inter-agency doctrine must be developed and practiced to maintain an acceptable level of readiness.

Training

- 25. Training is the final step in preparing for war. Forces, materiel and doctrine must be integrated into a single consistent warfighting concept that is understood and trained to across the force.
- 26. Training, to be worthwhile, must be as realistic as possible to replicate the three domains of the environment of war. The standards for training need not always be quantitatively measurable, but must satisfy the performance requirements of the leadership of the force.
- 27. The best training replicates the chaos and friction of war. Training should be tough and as realistic as possible without endangering participants.
- 28. Training should emphasize critical thinking skills for problem solving on the part of all participants since school solutions seldom fit the unique demands of war.
- 29. Individual skills should be trained to a commonly accepted standard of performance under a variety of conditions.
- 30. Organizational training can only be assessed against the standards of responsible leaders. Each individual must feel responsible for his or her contribution to the unit's effort, but the leader must be held responsible for the organization's performance.
- 31. The goal of preparing for war is to provide a credible deterrent to war and the capability to be victorious in war at any level once it starts.

VIII. Prevention of War

The prevention of war has long been a goal of societies. Tu Mu said: "He who excels at resolving difficulties does so before they arise. He who excels in conquering his enemies triumphs before threats materialize." Contemporary deterrence policy developed by strategists, however, focuses primarily on weapons of mass destruction. Authors of American deterrence thought and policy, Bernard Brodie and others, have recognized the importance of conventional military force deterrence, but they do not credit other instruments of power as useful in deterring any level or kind of war.

Deterrence, as part of a theory of war, must address the root causes of war and not just the capabilities of forces likely to fight the war. A balanced deterrence policy would include all available sources of national power used in a pro-active manner to eliminate the root causes of war.

- 1. The prevention of war is called deterrence. War is based on perception. Therefore, deter by showing knowledge, strength and resolve. Deterrence is the heart of American security policy as it is the least violent means to wage peace.
- 2. The goal of deterrence is three fold; to dissipate conditions which give rise to war, to prevent escalation of war, and to maintain stability during the transition to peace. Therefore, deterrence covers a wide range of activities including diplomatic dialogue, foreign assistance, force training, acts of war at various levels, and weapons of mass destruction.
- 3. A failure to deter the escalation of threats to national interests will eventually result in a threat to the vital interest the survival of the state. If the entity's will remains intact at this point, total war may ensue and a decision by arms is probably required. Military operations remain the "cash payment" of war.
- 4. The strength of deterrence is a function of the perceived capability and credibility of the instruments of power.
- 5. Deterrence policy is passive and active.

- 6. Passive deterrence is the threat of using instruments of power against an enemy. Passive deterrence measures are primarily military capabilities which can destroy the enemy. This type of deterrence requires a large expenditure of resources to develop and maintain a capability that may never be used. Resources for passive deterrence measures are usually based on the assessment of likely threat capabilities. Passive deterrence is primarily based on the science of war the measurable threats to a society.
- 7. Active deterrence is the pro-active use of instruments of power to dissipate the conditions which give rise to war. Resources for active deterrence are usually based on the assessment of likely threat intentions and the conditions which influence intentions. Active deterrence is primarily based on the art of war the uncertain threats to a society.
- 8. When active deterrence operations rise above the equilibrium of normal political intercourse, they may be a form of war. If this level of war prevents the escalation of the threat to higher levels of national interest, then war has served as active deterrence. Total war ensues when deterrence has failed and war has escalated to include all instruments and capabilities. However, deterrence measures should be continued as they are still essential for a transition to peace.
- 9. Theoretically, an increase in resources for active deterrence measures would eliminate the requirement for costly passive deterrence measures. In reality, substantial measures of passive deterrence will be necessary until weapons of mass destruction (capability) are no longer a threat and human nature (intention) changes.
- 10. Therefore, the art of war includes the creative use of instruments of power to diffuse the conditions that give rise to war and shape the intentions of potential enemies. Without hostile intent or cause for war on one side, there is no perceived threat to national interests on the other side a state of peace. This is the goal of the American Art of War.

IX Strategy

Strategy, in general, is the coordinated use of available ways (methods) and means (resources) to achieve desired ends (aims). Strategies, ways-means-ends relationships, can be developed at any level and for any instrument of power.

- 1. Grand strategy is the harmonization of all instruments of power to achieve political aims. The goal of grand strategy is to optimize the concentrated effects of power to achieve political aims rapidly, with as little expenditure of resources, loss of life and collateral damage as is possible. Thus grand strategy concerns not only the political objective of the war, but also the conditions of a society in the aftermath of war.
- 2. In a theater of war, strategy is the orchestration of available instruments of power to achieve strategic aims.
- 3. Military strategy concerns the orchestration of military capabilities to achieve the strategic aim. Ideally, a military strategy sets the conditions for battle which deny the enemy's use of its own capabilities. All instruments of power can and should have a strategy for their employment.
- 4. War is planned and conducted at three different levels: strategic, operational and tactical.
- 5. The strategic level of war concerns the allocation of means and the identification of ways to achieve the political aims of a war.
- 6. The operational level of war concerns the creative use of distributed operations to achieve strategic aims. This is the most critical level of war. At this level, political aims are translated into measurable and achievable end states that will allow for peace. Operations are planned in a campaign which fully integrates all instruments of power and capabilities within those instruments.
- 7. A campaign is a series of operations or engagements arranged in time and space to attain a strategic aim. The campaign plan is the way means

are employed to attain the end. A campaign is usually structured in phases to accomplish a series of operational objectives, one setting the conditions for the next until the desired end state is achieved. The key to a successful campaign plan is its flexibility, or freedom of action, which allows shifting of the main effort to take advantage of opportunities presented by chance.

- 8. The tactical level of war concerns the direct interaction of the instruments of power between belligerents. The goal of tactics is to impose will on the enemy to achieve operational objectives.
- 9. The common thread between all levels of war is the commander's vision. This vision is expressed in the commander's intent which is carried to the tactical level through the intent of subordinate commanders.
- 10. The commander's intent includes the purpose of an operation, the planned use of all available forces, and the desired end state. All of this should be presented in clear and concise language that can be remembered by the soldier at the lowest level.

X. War Plans

War plans are essential for the conduct of war. Based on the estimate, a commander directs the development of plans to communicate his vision of the conduct of the war. While the execution of war seldom follows the plan exactly, the concepts and calculations embodied in the plan provide a reasonable starting point from which the commander can adjust. Therefore plans reduce, but cannot eliminate, the risk associated with the conduct of the war. Plans flow from the political objective and the strategy envisioned to accomplish that end. Operational concepts serve to translate a strategy and its political objectives into a plan for war. War plans can be developed at strategic, operational and tactical levels as well as for specific types of operations.

1. The goal of war plans is to reduce the risk associated the conduct of war.

Operational Concepts

- 2. Several operational concepts must be considered, as a minimum, in the preparation of war plans.
- 3. Center of Gravity The center of gravity is the "hub of all power and movement, on which everything depends." In modern societies, multiple centers of gravity will probably exist. Different centers of gravity may be found at different levels of war or in phases.
- 4. Stress Points Critical multi-dimensional points in space and time, control or destruction of which directly influences the center of gravity. These points may be specific forces or instruments, system nodes, geographic decisive points, psychological themes or any other facet of capability.
- 5. Lines of Operation General direction of operations from start point to objectives.
- 6. Base Area of logistical support for the instruments of power.

- 7. Lines of Communication Specific routes or electronic links (air, land, sea, space and electronic) from base to supported unit.
- 8. Culmination Point Point of physical and moral insufficiency beyond which further offensive action cannot be successfully conducted.
- 9. Operational Objective The destruction or control of which ensures freedom of action and denies the same to the enemy.
- 10. End State The desired outcome in terms of disposition and level of the opponents will at the conclusion of war.

Strategic Plans

- 11. The strategy conducted in a war will vary with each "kind" of war. The kind of war will usually determine the dominant instrument of power. The way each instrument of power is employed must be tailored to fit the strategy. The effects of the instruments of power must not violate or nullify the political objective of the war.
- 12. Revolutionary war should be dominated by the political instrument. Other instruments play a supporting, but essential role.
- 13. Conventional military war should be dominated by the military instrument. American military strategy will usually be one of discriminate annihilation. Such a strategy will optimize the effects of the instruments of power at decisive points to destroy the enemy's will without destroying his society. This approach maintains the American moral ascendency while destroying enemy capabilities which may have given rise to optimism.

Operational Level

- 14. American warfighting focuses on operational art. Leaders must creatively use distributed capabilities to gain freedom of action and seek out opportunity.
- 15. American warfighting usually focuses on the center of gravity of the enemy. If the center of gravity cannot easily be attacked directly, stress points which support it will be attacked. This is called the indirect method.

- 16. Conditions for success must be established prior to a tactical operation by isolating, neutralizing and destroying selected enemy capabilities so that we dictate where and when we impose will on the enemy.
- 17. Freedom of action for the operational commander is maintained through the use of normal and extraordinary forces using lethal and non-lethal means. In this way balance is maintained and freedom of action is denied to the enemy.

Tactical Level

- 18. The goal of tactics is to concentrate the effects of power at the decisive point to impose will on the enemy. Normal and extraordinary forces should also be used at the tactical level to increase flexibility and balance.
- 19. Where possible, simultaneous operations will be used to paralyze the enemy actions and possible counter-actions much like torrents of water from a bursting dam.
- 20. Operations must be conducted with utmost speed to take full advantage of opportunity. Speed creates and amplifies effects.

Post-Hostilities

- 21. When destructive instruments of power are employed, a smooth transition into post-hostility activities must address the essential needs of a society which may be psychologically or physically destroyed.
- 22. War planning is a combination of art and science. It requires the creative use of available instruments of power based on a calculated assessment of the capabilities of both participants. "The object of art is creative ability; "just as an artist envisions a previously unknown masterpiece to be created with the resources at hand. "The object of science is knowledge." The scientist ensures the right instrument and resources are available at the right place at the right time. Only art can deal with the uncertainty of war; therefore the conduct of war is art based on an understanding of science.

XI. The Environment of War

Since war is a unique social phenomenon, it cannot be described in physical terms alone. The effects of war are physical in the sense of destruction, but they are also psychological. In modern war, the link between the physical and psychological aspects of war is the science of cybernetics, or the study of control systems. To understand and to optimize the effects of all instruments of war, it is important to define an environment of war. This environment is comprised of a physical, moral and cybernetic domains.

- 1. War is conducted in an environment comprised of three overlapping domains: physical, cybernetic and moral.
- 2. The physical domain concerns the entire process of physical effects: the destructive effects of weapons and munitions, terrain, weather, logistics and other physical factors.
- 3. The purely physical effects of war on an enemy and his materiel reduce the potential power of that enemy. Physical destruction, by itself, does not win wars but contributes to the weakening of the cybernetic and moral domain of the enemy.
- 4. Physical destruction to the extreme or of non-military targets may be contrary to the accomplishment of desired aims and may heighten the will of the enemy.
- 5. The cybernetic domain concerns the processes of organization, command and control, communications, computers, information flow and human systems. This domain may include the processes by which an entity controls economic, diplomatic and other policy activities.
- 6. Organization includes the design, function and procedures of the instruments of power.

- 7. Command, control, communications and computers involve command relationships, methods of controlling subordinate organizations and the hardware used to transmit and process information.
- 8. Information flow includes the mechanical, electronic and mental processing of information. This flow includes the personal exchange of information between individuals and flow of information between hardware and people.
- 9. The most critical and sensitive element of information processing is the human intellect.
- 1A. The destruction or weakening of the enemy's exhernetic domain results in disorganization. Disorganization of normal operations also reduces potential power as it contributes to the destructive physical effects and a weakening of will.
- 11. Improved cybernetics usually result in greater potential power; capabilities can be better directed and will is strengthened.
- 12. The moral domain concerns the breakdown and generation of will. It includes the inspiring, sustaining, and revitalizing of trust and morale.
- 13. Individual will flows from the character of an individual, belief in a just cause, trust in his peers, leaders and country, and the morale of the organization.
- 14. Morale is the collective will of the individuals in an organization.
- 15. An organization can survive the effects of physical destruction and the effects of cybernetic disorganization if it retains the will to resist.
- 16. Breakdown of will, however, results in disintegration of fighting capability. An organization cannot continue to resist without will. If one entity no longer has the will for war, the other has become the victor by default.

17. That is why will is the soul of war.

XII. Waging War

Waging war is the application of war theory to reality through the use of strategies and doctrine to employ the instruments of power. Wars have beginnings and endings, but deterrence measures continue until peace has been gained. The most efficient use of power for the conduct of war will usually include a mix of the instruments based on the kind of war desired. Ideally, war is conducted as quickly as possible to conserve resources and will.

- 1. The waging of war begins when one political entity initiates action to impose will on another.
- 2. War ends when the will on one side of the conflict has been completely disintegrated or a negotiated settlement has been agreed upon by all parties in the conflict. In the first case, the will of one side has been imposed upon the other. In the second case, the will to continue the war on all sides have reached a point of relative equilibrium.
- 3. Stability operations, a form of active deterrence, continue during and after the war to reduce the conditions that give rise to war. Failure to continue stability operations may lead to another outbreak of war.
- 4. "War is an act of force, and there is no limit to the application of that force." The amount of force applied, however, must not violate or nullify the political objective.
- 5. Any suspension of war short of the political objective is illogical. There is only one reason to suspend action, and it can never be present on more than one side: "a desire to wait for a better moment before acting."
- 6. "A victory is greater for having been gained quickly; defeat is compensated for by having been long postponed."
- 7. "Generally in war the best policy is to take a state intact; to ruin it is inferior to this. Thus, what is of supreme importance in war is to attack the

enemy's strategy. Next best is to disrupt his alliances. The worst policy is to attack cities. Attack cities only when there is no alternative."

- 8. "When the army engages in protracted campaigns the resources of the state will not suffice. Thus, while we have of blundering swiftness in war, we have not yet seen a clever operation that was prolonged. For there has never been a protracted war from which a country has benefited. Thus, those skilled in war subdue the enemy's army without battle. They capture his cities without assaulting them and overthrow his state without protracted operations."
- 9. "That the army is certain to sustain the enemy's attack without suffering defeat is due to operations of the extraordinary and the normal forces." "The force which confronts the enemy is the normal; that which goes to his flanks the extraordinary. No commander of an army can wrest the advantage from the enemy without extraordinary forces." "I make the enemy conceive my normal force to be the extraordinary and my extraordinary to be my normal. Moreover, the normal may become the extraordinary and vice versa."
- 10. The concept of normal and extraordinary forces is key to balance and freedom of action in war. The normal force can be considered the "direct" approach while the extraordinary forces is the "indirect" approach. The normal and extraordinary forces are interchangeable as the main or supporting efforts of an operation.
- 11. There are an unlimited variety of combinations of normal and extraordinary forces. All instruments of power can be employed according to this concept or as a complimentary mix.
- 12. The most efficient use of power is to optimize the effects of each instrument of power without nullifying the effects of others. The political objective provides the limit for the effects of the combined use of instruments.
- 13. "The decision by arms is for all major and minor operations in war what cash payment is in commerce." Military operations cover a spectrum of

activities to support passive deterrence, active deterrence and total war. Military warfighting can occur in support of active deterrence with limited aims, or in support of total war.

- 14. All military operations are related to security policy. During peace, they are usually related to passive deterrence measures but may be active deterrence measures to dissipate conditions that give rise to war. Once military operations are used to impose will they are in support of war policy.
- 15. Military operations as passive deterrence measures include, but are not limited to, the following: intelligence gathering, preparation for war (recruitment, materiel development and fielding, doctrine and training), routine out of country visits and port calls, exchange programs and non-combatant evacuation operations.
- 16. Military operations as active deterrence measures include, but are not limited to, the following: shows of force, specific out of country training missions, peacekeeping, peacemaking, nation assistance, security assistance missions, combatting terrorism and drug trafficking and all contingency operations.
- 17. Military operations which involve fighting as deterrence measures or those to directly impose will are included in military warfighting.
- 18. Military operations cannot be conducted in isolation of the other instruments of power in peace or in war. The confluence of the effects of all instruments available to an entity will increase their effect on the enemy's will or the conditions that give rise to war.

XIII. Leadership

Leadership is the single most important factor in the conduct of war. Leaders establish the policy for war, they inspire the will of the people to support war and they direct the instruments of power in war.

- 1. Leadership for war has two complementary components; the individual leadership abilities and the leadership philosophy of an organization.
- 2. Individual leadership includes those leadership traits and skills necessary to sustain and inspire will, to command and control forces and to make decisions in war. These personal abilities are commonly described as genius or generalship.
- 3. Individual leadership responsibility for war begins with the President, or equivalent, and other national leaders responsible for the security needs of the political entity. As the policy makers, these leaders are responsible for inspiring the people to support the activities of war. In addition, they are responsible for providing resources to the instruments of power.
- 4. Genius in war is demonstrated by a leader capable of intuition and of balanced temperament.
- 5. Intuition in war is the ability to reach the correct conclusions and make the right decisions based on imperfect information and in less time than non-intuitive leaders. This ability is usually a function of individual intelligence, study and experience. Intuition does not negate the value of calculation, or the science of war, rather it serves to speed the link between science and the creative art of war. In modern war, intuition is an essential skill for the effective and creative use of available resources.
- 6. A balanced temperament allows a leader to remain focused on the objective in the chaos of war. His determination and perseverance flows from a strong internal source of character while his a cool demeanor reinforces the confidence of his subordinates.

- 7. While each individual develops his own temperament and intellect, intuition can be developed through study and experience. Ideally, every soldier will develop some level of intuition.
- 8. The leadership philosophy of an organization, military or otherwise, should provide a consistent approach to problem solving and a climate that fosters creative thinking towards war.

Dominant Leadership Themes

- 9. Dominant leadership themes provide general guidance for decision making in war.
- 10. Creativity Leaders must seek out creative and innovative solutions to the challenges of the modern battlefield.
- 11. Speed Leaders must think and act quickly to take advantage of opportunity.
- 12. Information and responsibility sharing Leaders must be willing to share information with peers and subordinates. Leaders must be able to inspire subordinates to accept responsibility for their actions.
- 13. Boldness Leaders must be bold in their thoughts and actions in war. If in doubt, select the bolder course of action and then plan to mitigate risk.
- 14. Intuition Leaders must develop and apply intuition to keep up with the pace of war.
- 15. User focused information Leaders must tailor information flow to meet the specific needs and functions of an organization.

Leadership Climate

16. A leadership climate provides the parameters and environment for leader development and decision making. Certain elements comprise such a climate for war.

- 17. Vision The commander must have in mind and be able to communicate a clear and achievable end state for operations and a concept for getting there.
- 18. Systematic change Organizations must have a system of handling change without disrupting ongoing operations.
- 19. Alignment Organizations must encourage individual growth as a means to strengthen the group as a whole. The result of alignment increases individual loyalty and a sense of responsibility in each individual.
- 20. Decentralization Operations in war must be decentralized to maintain flexibility. The organizational structure must support this end.
- 21. Thinking, Learning and Creating An organization must foster lifetime skills of thinking, learning and creating to develop these skills in individuals for war.
- 22. Realistic and demanding training Leaders must be subjected to tough training to prepare for war.
- 23. Professional trust and respect Trust and respect must be developed before entering war.
- 24. Commander's intent Leaders must express their vision to subordinates through intent which provides flexibility in operations.
- 25. Cohesion Cohesive organizations maintain will during the conduct of war.
- 26. All aspects of leadership must be developed by a political entity to meet the challenges of war.

Epiloque

This paper marks the beginning of a journey, not a destination. My stated goal is to stimulate thought on a modern theory of war for the United States. Our country may never publish a theory of war or peace, which would be a shame, but perhaps discussion of the theoretical constructs presented here will contribute to a more general understanding of theory and its value by those who must practice of the art of war.

The challenge presented in the preface of this paper was that classical theories of war are no longer sufficient to explain modern war. The argument begins with the assumption that war is a social phenomenon influenced by changes in the social order. If our society has changed a great deal since the development of the classical theories of war, then the essence of war must have also changed and therefore we should adjust our theory of war. There is, however, a constant in war - man. The nature of man has remained relatively constant over time and so has the nature of war. As long as the nature of man remains constant, there will be war. The changes in our society, however, will effect the "kind of war" upon which we embark.

Determining the "kind of war," according to Clausewitz, is "[t]he first, the supreme, the most far-reaching act of judgement that the statesman and commander have to make." Clearly Clausewitz understood the importance of this determination, but he could not have predicted the increased power of ideology, economics, information, the media or technology in war. He realized the link between society and war, but not the causes of modern war or the instruments of modern power. Clausewitz could plan for and fight a military kind of war to achieve the political objectives in his day. In modern societies, we must plan for and be able to fight many kinds of war.

Many of the classical theoretical concepts still apply to modern war; they just need to be demilitarized. The bulk of this paper has been developed from Sun Tzu, Clausewitz and Jomini who focus almost entirely on the clash of arms. Their sound concepts have been modernized in this paper by ideas of contemporary social scientists like Geoffrey Blainey, Alvin Toffler and Paul Kennedy who focus on the social causes of war and sources of power prevalent today. In the proper social context, the great classical theories of war still contribute much to our understanding of war and peace. Unfortunately, many contemporary strategists have not

modernized their understanding of war and still plan purely military strategies to achieve objectives not attainable through military means. This is why we need to discuss and present theory in terms which reflect the new realities of society.

Another point worthy of review is the use of a broad definition of war in a paper working towards a theory of peace. The broad definition of war is essential to encourage people to start thinking about other "kinds of war." If strategies are employed to address the causes of war and the less violent kinds of war earlier, the frequency of violent war may be reduced. Reducing the potential causes of war and non-violent war are nothing less than "waging peace." Waging peace may, in the end, be a more desirable description of the art of war for a kinder and gentler America.

The implications of this theory of war on existing security strategies could range from little effect to a dramatic reform of our security program. Much, but not all, of our current strategy and doctrine for Low Intensity Conflict (LIC) includes many ideas presented in this paper. There appears to be, however, a dangerous assumption that the non-military instruments are really only important in the LIC environment. LIC remains the only area in which the inter-agency process has actually addressed strategy with a balanced and holistic approach. Even in LIC, where the military instrument is in a supporting role, the Department of Defense leads the other agencies in inter-agency thinking and planning. If this theory were fully adopted, our security program would require political, economic, and informational warriors and structures. A more realistic adoption of this theory may, as a minimum, result in improved inter-agency planning, training and execution.

The final question I shall propose is the rhetorical question I asked myself before starting and throughout this paper. What is the goal?

Notes

Preface

- 1. Sun Tzu, <u>The Art of War</u>, Translated by Samuel Griffith, (London: Oxford University Press, 1963), 63.
- 2. Carl von Clausewitz. On War, edited and translated by Michael Howard and Peter Paret (Princeton: Princeton University Press, 1989), 149.
- 3. A. A. Svechin, <u>Strategy</u>, second edition, (Moscow: Voennyy Vestnik (Military Herald), 1927) printed by Yevgeniya Sokolova Surf Printers, Leningrad, Main Literary Administration No. 77401,15.
- 4. Clausewitz, 88.
- 5. Michael I. Handel, "Sun Tzu and Clausewitz: <u>The Art of War</u> and <u>On War</u> Compared," (Carlisle Barracks,PA: Strategic Studies Institute, 1991), 4.
- 6. Ibid, 4.
- 7. Clausewitz, 88.

Chapter I

- 1. Goal here refers to a desired end state, which differs from the objective of war to impose will on the enemy.
- 2-3. Author's definition. If one political entity does not perceive the actions of another threatening, a state of peace must exist. See Geoffrey Blainey. <u>The Causes of War.</u> (New York: The Free Press, 1988). 141. Many current government publications describe normal political activity as peacetime competition. HQ TRADOC, <u>TRADOC Pam 525-5B</u>, <u>AIRLAND OPERATIONS (Final Draft)</u>, 13 Jun 91, 25.
- 4. Author's definition based on the electrified trinity discussed in Chapter III.
- 5-8. Levels of national interests have been suggested by a number of authors. The labels used here are from former President Richard Nixon. Nixon's definitions have been modified to include economic considerations. Nixon recognizes the import of economics to national security however, he does not tie the levels of national interests to national standard of living or quality of life. Richard M. Nixon, Seize the Moment, (New York: Simon & Schuster, 1992), 36.
- 9. Author's description of a means assessment by political leaders. Also see Carl von Clausewitz, On War, edited and translated by Michael Howard and Peter Paret (Prinecton: Princeton University Press, 1989), 91. Blainey, 91, 151, 214. and George Kennedy, The Rise and Fall of the Great Powers.
- 11. Author's description of Blainey's clues to the causes of war. Blainey, 53, 159.
- 12. Ibid, 53.
- 13. Clausewitz, 91
- 14. Blainey's logic is that optimism causes war and a lack of optimism causes peace. If tensions develop between nations but there is no optimism, an alternative solution must be absorbed internally. Ibid, 53.

Chapter II

- 1. Clausewitz, 75.
- 2. "War is an act of human intercourse." Ibid, 149. "War is merely the continuation of policy by other means." Ibid, 87.
- 3. By types of war I mean the labels for efforts to impose will on an enemy, violent or otherwise. The more general use of the term war here to describe non-violent activities will make some people uncomfortable and is almost certainly to be considered politically unacceptable. Some might argue that calling the use of economic sanctions an act of war will increase the potential for escalation to more destructive acts of war a slippery slope of sorts. The intent here is just the opposite. Calling economic sanctions an act of war should escalate only the just war debate, not the potential for violent war. If there is not a just cause for the use of power to impose will at a less destructive level, then combat should be out of the question. If the cause is just, however, escalation based on reasonable proportionality may be warranted. When our rationale for going to war of any type is just, the will of the people will dictate the ways and means to be employed.
- 4-6. This "paradoxical" trinity is a remarkable and durable description of the nature of war. Clausewitz, 89.
- 7. Ibid, 77, 149.

- 8-9. Author's contemporary interpretation of Clausewitz's trinity concerning people.
- 10. Sources of power are from Toffler. Modifications to his concept will be explained in Chapter IV. Alvin Toffler. <u>POWERSHIFT</u>, (New York: Bantam Books, 1991), 3. War as a measurement of relative power from Blainey, 122.
- 11-12. Clausewitz, 81, 87, 89,
- 13. Ibid, 89. and Mao Tse-tung, "Problems of Strategy in China's Revolutionary War," 1936, reprinted by the Combat Studies Institute, CGSC, Ft. Leavenworth, KS, 77.
- 14. Clausewitz, 104 and other theorists.
- 15. Clausewitz, 119.
- 16. Ibid. 119.

Chapter III

1-12. This chapter explains the author's concept of the electrified trinity. The trinity still reflects the nature of war, however, each tendency of the trinity has been influenced by the contemporary effects of technology, media and economics. Clausewitz demonstrated an appreciation for these factors, but he could not have predicted the magnitude of their influence on war today. Furthermore, the electrified trinity has application for all instruments of national power while Clausewitz considered only military power as the extenuation of policy. James Schneider also recognizes the effect of the media on war. James J. Schneider, "The Theory of Operational Art," Theoretical Paper No. 3, School of Advanced Military Studies (Ft. Leavenworth: SAMS, March 1988), 6. Paul Kennedy's basic arguement is "that there exists a dynamic for change, driven chiefly by economic and technological developments, which then impact upon social structures, political systems, military power, and the position of individual states and empires." Paul Kennedy, The Rise and Fall of the Great Powers. New York: Vintage Books, 1989, 439.

13. Author's concept.

Chapter IV

- 1. Author's consideration of all instruments and sources of power as policy by other means. Clausewitz, 87.
- 2. Sources of power come from Alvin Toffler, but have been modified. Toffler considers knowledge, wealth and violence sources of power for people as well as national governments. The author accepts knowledge and wealth as sources for most of our instruments of power. Strength, however, better represents Toffler's concept of violence for national security purposes. Toffler, 3. Paul Kennedy also uses the term strength to describe military power. Kennedy, xvi.
- 3. Toffler explains the power of knowledge throughout this book. Knowledge for military purposes in discussed, 16-17. Also Clausewitz, 147.
- 4. Torrier explains the power of wealth, 23-30. Author translates the power of wealth to the will of the people through the standard of living.
- 5. Author defines strength in relation to national security concerns. Kennedy states that all power is relative and always changing. Kennedy, 536.
- 6. Blainey, 122.
- 7. Author's translation of sources of power to the instruments of power.
- 8. Author considers combined effects of power greater than the instruments of power used by themselves.
- 9-11. Author's assessment of how sources of power translate into instruments of power represented in the President's National Security Strategy. The White House, <u>National Security Strategy of the United States</u>, (Washington: U.S. Government Printing Office, 1991).

Chapter V

- 1. Clausewitz does not consider war to be over until the enemy's will has been broken. Clausewitz, 90.
- 2. Author's definition of will.
- 3-4. Numerous authors have attempted to fix American values. Sam Sarkesian's set of American values seem to cover the essence of American beliefs and values with the exception of liberalism. The author added liberalism to emphasize the choice our standard of living allows. Sam Sarkesian, US National Security. Policymakers. Processes, and Politics, (Rienner Publications, 1989), 5-6.
- 5. Clausewitz, 186-189.
- 6. Author's definition.

- 7-9. Author's explanation of relationship between values, standard of living and will. Americans have always been willing to defend our country, but are less willing to sacrifice if the survival of the state is not threatened. See Nixon, 40.
- 10-13. The will-power dynamic is tied to the levels of national interest. Also see Nixon, 37.
- 14. Although Clausewitz does not consider will a center of gravity, he recognizes that it must be broken to win the war. Clausewitz, 90.

Chapter VI

- 1. Author's concept based on Clausewitz. Clausewitz, 88.
- 2. Ibid, 73. Author expands to include multiple sources of power.
- 3. Author's concept of stress points is explained in Chapter X.
- 4. Sun Tzu, 84.
- 5. Ibid, 84.
- 6. Ibid. 84.
- 7. Ibid, 69.
- 8. Ibid. 69.
- 9. Ibid. 71.
- 10-12. Many military authors make reference to the capabilities and intentions of a threat, however, no theorist has specifically defined the threat in this way. Capabilities and intentions are suggested by Blainey logic that an enemy has to be optimistic (intentions) based on his assessment of relative power (capabilities). Here the author attempts to describe capabilities and intentions for the purpose of estimates.
- 13. Simpkin defines risk as the "possibility" that a "predicted chance of success will be degraded by lack of information." Richard E. Simpkin, <u>Race to the Swift: Thoughts on Twenty-First Century Warfare</u>, (London: Brassey's Defense Publishers, 1985), 197. This risk is identified by what Sun Tzu calls "calculations" or estimates of the enemy. Knowing the enemy and the availability of information necessary to clarify the uncertainty of war, a commander must shape a flexible plan. Simpkin, 206.

Chapter VII

- 1. Author's description of Blainey. "Any factor which increases the likelihood that nations will agree on their relative power is a potential cause of peace." Blainey, 294.
- 2. Sun Tzu, 63.
- 3. Author's synthesis of Clausewitz, 149 and Blainey, 249.
- 4. Logical conclusion from synthesis of the electrified trinity and will.
- 5. Author's expansion of Nixon, 37 and Toffler, 415-421.
- 6. Toffler, 420-421.
- 7. Author's concept related to deterrence theory in Chapter VIII.
- 8. Author's conclusion.
- 9. Author's synthesis of national values and will.
- 10-11. Author's conclusions.
- 12. French Colonel Ardant du Picq identified the importance of shaping an army based on the nature and character of the people in the early 1900s. He believed: "An army is not really strong unless it is developed from a social institution." We are able to maintain ties with our social institutions by recruiting from all of the people and by maintaining reserve forces in all of our states. Ardant du Picq. Battle Studies: Ancient and Modern Battle, translated by John N. Greely and Robert C. Cotton, published in Boots of Strategy: Book 2, (Harrisburg: Stackpole Books, 1987), 248.
- 13-18. Author's conclusions.
- 19. Boyd's OODA loop has been used as a model for tactical actions. The addition of a feedback (F) activity would allow for an increase in battle damage assessment and resulting efficiencies.
- 20. Maintenance of our industrial base for war is a critical element of national strength. A national vision for economic growth should include cooperative programs between the government and industry for cooperative military-commercial manufacturing facilities. High cost commercial plants could be underwritten by the government in exchange for wartime capabilities.
- 21-22. Author's conclusion.
- 23. Michael Howard, "Military Science in An Age of Peace," Speech given upon receipt of the Chesney Memorial Gold Medal, 3 Oct 73, printed in RUSI Journal of the Royal United Services Institute for Defense Studies, March 1974, reproduced by the Command and General Staff College, Ft. Leavenworth College, 3-9.

Chapter VIII

Intro. Tu Mu's interpretation of Sun Tzu. Sun Tzu. 77.

- 1-10. This chapter is the author's attempt to bring both nuclear and conventional military forces and other instruments of national power under a single deterrence concept. An assumption is that the U.S. will always attempt to resolve a crisis at the lowest possible level of violence.
- 1. Sun Tzu says "All A vfare is based on deception. Therefore, when capable, feign incapacity; when active, inactivity." Sun Tzu, 66.

Chapter IX

- 1. B. H. Liddell Hart, Strategy, (London: Prager Publishers, Inc., 1974), 322.
- 2. Author's conclusion.
- 3. Author's conclusion and Sun Tzu. Sun Tzu, 77.
- 4-5. HQ, TRADOC, <u>TRADOC Pam 11-9</u>, <u>Blueprint of the Battlefield</u>, (Ft. Monroe, VA: HQ, TRADOC, 1990), 6.
- 6. James J. Schneider, "Vulcan's Anvil: The American Civil War and the Emergence of Operational Art," Theoretical Paper No. 4, School of Advanced Military Studies (Ft. Leavenworth: SAMS, June 1991), 64.
- 7. James M. Dubik, "A Guide to the Study of Operational Art and Campaign Design," paper prepared for the School of Advanced Military Studies, (Ft. Leavenworth, KS: SAMS, May 1991),5. 8-10. Author's conclusions.

Chapter X

- 1. Author's interpretation of Sun Tzu. Sun Tzu. 87-89.
- 3. Clausewitz, 595-596.
- 4. Stress points may include decisive points but are not limited to geographic points; they can also be forces or system nodes in any dimension of the battlefield. The center of gravity of a bridge has stress points which support the bulk of the weight of the bridge. The bridge will collapse in its entirety if the stress points can be discriminably destroyed. Stress points on a battlefield provide a focus for an indirect attack to the center of gravity.
- 5. Antoine Henri Jomini, <u>Summary of the Art of War</u>, edited by BG J. D. Hittle, reprinted in <u>Roots of Strategy</u>, <u>Book 2</u>, (Harrisburg: Stackpole Books, 1987), 473.
- 6. Jomini, 465, Clausewitz, 341,
- 7. Jomini, 472-3, Clausewitz, 345.
- 8. Clausewitz, 528.
- 9. Drawn from Schneider's "common aim" of operational art. Schneider, #4, 39.
- 10. Dubik, 12.
- 11-21. Author's conclusions.
- 22. Clausewitz, 148.

Chapter XI

1-17. This chapter is the author's description James Schneider's three domains of war. James J. Schneider, Theoretical Paper No. 3, 6-7.

15. Ibid, 7.

Chapter XII

- 1-3. Author's conclusions.
- 4. Clausewitz, 77, 81.
- 5. Ibid 82.
- 6. Ibid. 238.
- 7. Li Ch'uan interprets: "Do not put a premium on killing." Sun Tzu, 77-78.
- 8 Ibid 73 79
- 9. This paragraph includes Sun Tzu's concept of normal and ordinary forces. The first sentence is from Sun Tzu, the second is an interpetation by Li Ch'uan and the third by Ho Yen-hsi. Sun Tzu, 91. 10. Sun Tzu's translator uses the terms "direct" and "indirect" in his notes. Sun Tzu, 91. This approach to the use of forces has application across the instruments of power.

13. Clausewitz, 97.

14-18. Author's conclusions.

Chapter XIII

- 1-3. Author's conclusions.
- 4. Clausewitz says genius has intellect and temperament. Clausewitz, 100.
- 5. Author's modification of Clausewitz. Ibid, 101-105.
- 6. Author's modification of Clausewitz. Ibid, 101-107.
- 7-8. Author's conclusions.
- 9-27. Leadership philosophy drawn from author's monograph on the subject. William J. Wansley, "American Spirit: A Leadership Philosophy for U. S. Tactical Forces," monograph prepared for the School of Advanced Military Studies, (Ft. Leavenworth, KS: SAMS, Dec 1991).

SELECTED BIBLIOGRAPHY

Articles

DePuy. William E. "Concepts of Operation: The Heart of Command, The Tool of Doctrine." ARMY Magazine, Aug 88, Reprinted by the School of Advanced Military Studies, CGSC, Ft. Leavenworth, KS., AMSP Course 2 Readings, Tactical Dynamics Book 3). 93-104.

Earle, Edward Mead. "Adam Smith, Alexander Hamilton, Friedrich List: The Economic Foundations of Military Power." in <u>Makers of Modern Strategy: from Machiavelli to the Nuclear Age</u>. ed by Peter Paret. Princeton: Princeton University Press, 1986.

Handel, Michael I. "Sun Tzu and Clausewitz Compared." Carlisle Barracks, PA: Strategic Studies Institute, 1991.

Rosen, Stephen Peter. "New Ways of War: Understanding Military Innovation." <u>INTERNATIONAL SECURITY</u>, Summer 1988. Vol. 13, No. 1.

Shy, John and Thomas W. Collier. "Revolutionary War." in <u>Makers of Modern Strategy: from Machiavelli to the Nuclear Age</u>, ed by Peter Paret. Princeton: Princeton University Press, 1986.

Books

Bacevich, A.J.. The Pentomic Era. Washington D.C.: National Defense University Press, 1986.

Blainey, Geoffrey. The Causes of War. New York: The Free Press, 1988.

Clausewitz, Carl von. <u>On War</u>. edited and translated by Michael Howard and Peter Paret. Princeton: Princeton University Press, 1989.

Cohen, Eliot A. and John Gooch. <u>Military Misfortunes: The Anatomy of Failure in War.</u> New York: The Free Press, 1990

de Bloch, Jean. <u>The Future of War in Its Technical. Economic and Political Relations</u>. Translated by R.C. Long. Boston: The World Peace Foundation, 1914. Reprinted by the Combat Studies Institute, Command and General Staff College, Ft. Leavenworth, KS.

du Picq, Ardant. <u>Battle Studies: Ancient and Modern Battle</u>. Translated by John N. Greely and Robert C. Cotton and published in <u>Roots of Strategy</u>. <u>Book 2</u>. Harrisburg: Stackpole Books, 1987.

Fuller, J.F.C. <u>Generalship: Its Diseases and their Cure</u>. Harrisburg: Military Service Publishing Co., 1936.

Fuller, J.F.C. <u>Lectures on F.S.R. III</u>. London: Sifton Praed & Co., Ltd., 1932. Reproduced by the Combat Studies Institute, Command and General Staff College, Ft. Leavenworth, KS.

Goldratt, Eliyahu M. and Jeff Coat. <u>The Goal: A process of Ongoing Improvement</u>. Croton-on-Hudson, NY: North River Press, 1986.

Jomini, Antoine Henri. Summary of the Art of War. Edited by J. D. Hittle and published in Roots of Strategy, Book 2. Harrisburg: Stackpole Books, 1987.

Kaufman, Daniel J., David S. Clark and Kevin P. Sheehan, edited by. <u>U.S. National Security Strategy</u> for the 1990s. Baltimore: The Johns Hopknis University Press, 1991.

Keegan. John. The Face of Battle. Harmondsworth, Middlesex: Penguin, 1976.

Kellett, Anthony. <u>Combat Motivation The Behavior of Soldiers in Battle</u>. Boston: Kluwer - Nijhoff Publishing, 1984.

Kennedy, Paul. The Rise and Fall of the Great Powers. New York: Vintage Books, 1989.

Koestler, Arthur. The Act of Creation. London: Penguin Group, 1964.

Liddell Hart, B. H. Strategy. Second revised edition. London: Signet, 1974.

Mao Tse-Tung. Selected Military Writings of Mao Tse-Tung. Compiled and printed by the Combat Studies Institute. Ft. Leavenworth, KS: Command and General Staff College.

Marshall, S.L.A. Men Against Fire: The Problem of Battle Command in Future War. Washington, D.C.: Infantry Journal, 1947; reprint ed., Gloucester, MA: Peter Smith, 1978.

Moran, Lord. <u>The Anatomy of Courage</u>, London: Constable & Company, 1945; reprint ed., New York: Avery Publishing Group Inc., 1987.

Musashi, Miyamoto. The Book of Five Rings. New York: Bantam Books, 1982.

Nixon, Richard. Seize the Moment. New York: Simon & Schuster, 1992.

Paret, Peter, ed. <u>Makers of Modern Strategy: from Machiavelli to the Nuclear Age</u>. Princeton: Princeton University Press, 1986.

Peters, Tom. and Nancy Austin. A Passion For Excellence. New York: Warner Books, Inc. 1986.

Peters, Tom. Thriving On Chaos. New York: Harper & Row, 1990.

Race, Jeffrey. War Comes to Long An. Berkeley: University of California Press, 1972.

Simpkin, Richard E. <u>Race to the Swift: Thoughts on Twenty-First Century Warfare</u>. London: Brassey's Defense Publishers, 1985.

Svechin, A. A. Strategy. second edition. Moscow: Voennyy Vestnik (Military Herald), 1927. printed by Yevgeniya Sokolova Surf Printers, Leningrad, Main Literary Administration No. 77401.

Sun Tzu. The Art of War. Translated by Samuel B. Griffith. London: Oxford University Press, 1963.

Toffler, Alvin. Powershift. New York: Bantam Books, 1990.

Van Creveld, Martin. Command in War. Cambridge: Harvard University Press, 1985.

Van Creveld, Martin. <u>Technology and War: From 2000 B.C. to the Present.</u> New York: The Free Press, 1989.

Van Creveld, Martin. The Transformation of War. New York: The Free Press, 1991.

Walzer, Michael. Just and Unjust Wars. Second edition. United States: BasicBooks, 1992.

Warden, John A. III. <u>The Air Campaign: Planning for Combat</u>. Washington D.C.: National Defense University Press, 1988.

Documents and Manuals

HQ, Department of the Army. <u>FM 22-100</u>, <u>Military Leadership</u>. Washington D.C.: Department of the Army, 1990.

HQ, Department of the Army. FM 22-102, Soldier Team Development. Washington D.C.: Department of the Army, 1987.

HQ, Department of the Army. <u>FM 22-103. Leadership and Command at Senior Levels</u>. Washington D.C.: Department of the Army, 1987.

HQ, Department of the Army. <u>FM 100-5, Operations</u>. Washington D.C.: Department of the Army, 1986.

HQ, US Army Training and Doctrine Command. <u>TRADOC Pam 11-9</u>, Blueprint of the Battlefield. Ft. Monroe, VA.: TRADOC, 27 April 1990.

HQ, US Army Training and Doctrine Command. <u>TRADOC Pam 525-5B. AIRLAND OPERATIONS</u> (FINAL DRAFT). Ft. Monroe, VA.: TRADOC, 13 June 1991.

The White House. <u>National Security Strategy of the United States</u>. Washington D.C.: U.S. Government Printing Office, 1991.

US Army Command and General Staff College. Student Text 100-9. Techniques and Procedures for Tactical Decisionmaking. Ft. Leavenworth, KS,: CGSC, July 1991.

Monographs and Papers

Cranz, Donald. "Understanding Change: Sigismund von Schlichting and the Operational Level of War." Monogaph, School of Advanced Military Studies. Ft. Leavenworth, KS.: US Army Command and General Staff College, May 1989.

Dubik, James M. "A Guide to the Study of Operational Art and Campaign Design." Paper prepared for the School of Advanced Military Studies. Ft. Leavenworth, KS: SAMS, May 1991.

Herbert, Paul H.. "Deciding What Has to Be Done: General William E. DePuy and the 1976 Edition of FM 100-5, Operations." Leavenworth Papers No. 16. Ft. Leavenworth, KS: U.S. Army Command and General Staff College.

Nelsen, John, T. II. "Where to Go from Here?: Considerations for the Formal Adoption of Auftragstaktik by the US Army. Monograph, School of Advanced Military Studies. Ft. Leavenworth, KS.: US Army Command and General Staff College, May 1989.

Rowlett, Ricky M. "The U.S. Army and Ground Combat Theory." Monogaph, School of Advanced Military Studies. Ft. Leavenworth, KS.: US Army Command and General Staff College, May 1990.

Schneider, James J. "The American Civil War and the Emergence of Operational Art." Theoretical Paper No. 4, School of Advanced Military Studies. Ft. Leavenworth, KS.: Command and General Staff College, June 1991.

Schneider, James J. "The Theory of Operational Art." Theoretical Paper No. 3, School of Advanced Military Studies. Ft. Leavenworth, KS: Command and General Staff College, 1988.

Wansley, William J. "American Spirit: A Leadership Philosophy for U.S. Tactical Forces." Monograph prepared for the School of Advanced Military Studies, Command and General Staff College, Ft. Leavenworth, KS., Dec 1991.

Wass de Czege, Huba. "Understanding and Developing Combat Power." Paper done at the School of Advanced Military Studies, Command and General Staff College, Ft. Leavenworth, KS., 10 Feb 1984.

Speeches

Howard, Michael. "Military Science In AN Age of Peace." Speech given upon receipt of Chesney Memorial Gold Medal, 3 Oct 73. Printed in RUSI Journal of the Royal United Services Institute for Defence Studies 119 (March 1974): 3-9. Reproduced at the Command and General Staff College, Ft. Leavenworth, KS.

Starry, Donn A. "To Change An Army." Speech to U.S. Army War College Committee on a Theory of Combat. Carlisle Barracks. PA, 1982. Printed as an atricle in Military Review, March, 1983, 20-27.